

CLAIMS

1. An anti-abnormal type prion monoclonal antibody which reacts with abnormal type prion but does not substantially react with normal type prion by antigen-antibody reaction, or an antigen-binding fragment thereof.
- 5 2. The monoclonal antibody or the antigen-binding fragment thereof according to claim 1, which reacts with said abnormal type prion and does not substantially react with said normal type prion in immunohistostaining.
3. The monoclonal antibody or the antigen-binding fragment thereof according to claim 1 or 2, which reacts with said abnormal type prion which was not subjected to pretreatment.
- 10 4. The monoclonal antibody or the antigen-binding fragment thereof according to any one of claims 1 to 3, originated from an animal immunized with an immunogen comprising a carrier and a peptide having the amino acid sequence shown in SEQ ID NO: 2.
- 15 5. A monoclonal antibody or the antigen-binding fragment thereof, which is produced by hybridoma EBEB4C3Ebb (FERM BP-7808).
6. The monoclonal antibody or the antigen-binding fragment thereof according to any one of claims 1 to 5, which is a monoclonal antibody.
7. A hybridoma which produces the monoclonal antibody according to any one of claims 1 to 5.
- 20 8. A method for measuring abnormal type prion by an immunoassay utilizing said antigen-antibody reaction between said monoclonal antibody according to any one of claims 1 to 6, and an abnormal type prion.
9. An immunoassay kit for carrying out the method of claim 8, comprising the monoclonal antibody or the antigen-binding fragment thereof according to any one of claims 1 to 6.
- 25 10. A process for producing the anti-abnormal type prion monoclonal antibody

according to any one of claims 1 to 6, comprising immunizing an animal with an immunogen including a peptide consisting essentially of a plurality of regions in said abnormal type prion, which regions are discontinuous each other in primary amino acid sequence of said abnormal type prion, and which regions are ligated each other in said peptide; preparing hybridomas originated from antibody-producing cells of the immunized animal; screening a hybridoma which produces an anti-abnormal type prion monoclonal antibody which reacts with said abnormal type prion by antigen-antibody reaction but does not substantially react with said normal type prion by antigen-antibody reaction; and recovering said anti-abnormal type prion monoclonal antibody from said hybridoma selected by said screening.

11. The process according to claim 10, wherein said immunogen comprises a carrier and said peptide immobilized on said carrier.

12. The process according to claim 11, wherein said immunogen comprises said carrier and a plurality of kinds of said peptide.

13. The process according to any one of claims 10 to 12, wherein said peptide comprises a region containing at least two regions selected from the group consisting of E1 region, E2 region, B1 region, B2 region and B3 region.

14. The process according to claim 13, wherein said peptide has an amino acid sequence shown in SEQ ID NO:1.

15. The process according to claim 14, wherein said immunogen comprises a peptide having the amino acid sequence shown in SEQ ID NO:1 and a peptide having the amino acid sequence shown in SEQ ID NO:2.

16. The anti-abnormal type prion monoclonal antibody which was produced by the process according to any one of claims 10 to 15.

17. The immunogen used in the process according to any one of claims 10 to 15.